UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/542,640	04/03/2000	Frank J. Koch	007325-077	4650

7590 09/30/2008

Ronald L Grudziecki
Burns Doane Swecker & Mathis LLP
PO Box 1404
Alexandria, VA 22313-1404

EXAMINER	
TEIXEIRA MOFFAT, JONATHAN CHARLES	

ART UNIT	PAPER NUMBER
2863	

MAIL DATE	DELIVERY MODE
09/30/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/542,640	KOCH ET AL.	
	Examiner	Art Unit	
	JONATHAN TEIXEIRA MOFFAT	2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 August 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30,32,34-38 and 46-50* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,6-16,21-30,34 and 48* is/are rejected.

7)☒ Claim(s) *5,17-20,32,35-38,46,47,49 and 50* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

As this application is now being reviewed by a new examiner, and as all previous objections and rejections of the claims are hereby withdrawn in light of the following new grounds for rejection, this action is **non-final.**

Claim Objections

Claim 47 is objected to because of the following informalities:

Claim 47 appears to be identical in scope to claim 46. The examiner suggests that claim 47 be canceled and that claims 48, 49 and 50 be amended to depend upon claim 46.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

1.

Claims 1, 6-8, 21, 24-25 and 27-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Kubo (JP59180322A).

With respect to claim 1, Kubo discloses a method comprising:

1) Obtaining a plurality of coating thickness values with a probe electrically connected to an electronic memory (Fig 2 and Abstract, "Purpose").

2) Recording in the electronic memory the plurality of coating thickness values (Abstract, "Constitution").

2) Recording in the electronic memory a plurality of descriptive data, each descriptive data is associated with a respective one of the coating thickness values and provides information

concerning the respective one coating thickness value (Figs 5 and 6 show thickness values by coordinate where said coordinates are the "descriptive data").

With respect to claim 6, Kubo discloses that the descriptive data are defined with reference to an electronic pictoral representation of a coated article (Figs 5 and 6).

With respect to claim 7, Kubo discloses that the descriptive data represent locations on the electronic pictoral representation of the coated article (Figs 5 and 6 and Abstract "Purpose").

With respect to claim 8, Kubo discloses displaying a plurality of indicia on a graph on a video display screen, the indicia representing the plurality of coating thickness values (Figs 5 and 6).

With respect to claim 21, Kubo discloses an apparatus comprising:

1) An electronic memory (Fig 1 item 13).

2) Means for obtaining a plurality of coating thickness values with a probe electrically connected to the electronic memory (Fig 2).

3) Means for recording in the electronic memory the plurality of coating thickness values (Fig 2 and Abstract "Purpose").

4) Means for recording in the electronic memory a plurality of descriptive data so that each descriptive data is associate with a respective one of the coating thickness values and provides information concerning the respective one coating thickness value (Abstract and Figs 5-6, each thickness value corresponds to a location value).

With respect to claims 24 and 27, Kubo discloses that the descriptive data includes an image of an object measured to obtain the plurality of coating thickness values (Figs 5-6).

With respect to claims 25 and 28, Kubo discloses that the descriptive data provides a description of a source of the coating thickness values (Figs 5-6. Inherently an image "provides a description" of an object).

With respect to claim 29, Kubo discloses inputting the plurality of descriptive data via an input device prior to recording the plurality of descriptive data (Figs 4-6).

With respect to claim 30, Kubo discloses means for inputting the plurality of descriptive data (Fig 2 inherent since the data is stored it must be input at some time).

2.

Claims 1-2, 4, 6, 8-9, 21, 23, 25-26, 28, 30, 34 and 48 are rejected under 35 U.S.C. 102(e) as being anticipated by Elsmore (US pat 5416411).

With respect to claim 1, Elsmore discloses a method comprising:

1) Obtaining a plurality of coating thickness values with a probe electrically connected to an electronic memory (Fig 8 item 168).

2) Recording in the electronic memory the plurality of coating thickness values (Fig 8 items 168-174).

2) Recording in the electronic memory a plurality of descriptive data, each descriptive data is associated with a respective one of the coating thickness values and provides information concerning the respective one coating thickness value (Fig 8 item 168, "standoff" values are stored for each thickness value).

With respect to claim 2, Elsmore discloses that the steps of recording the coating thickness values and of recording the descriptive data are performed alternately (Fig 2 item 26 8

item 168, although the analog to digital device has two output lines, the probe components themselves alternatly record the "x" and "y" values which become thickness and offset).

With respect to claim 4, Elsmore discloses that the descriptive data comprise text (column 5 lines 16-30).

With respect to claim 6, Elsmore discloses that the descriptive data are defined with reference to an electronic pictoral representation of a coated article (Figs 3a-7).

With respect to claim 8, Elsmore discloses displaying a plurality of indicia on a graph on a video display screen, the indicia representing the plurality of coating thickness values (Figs 3a-7).

With respect to claim 9, Elsmore discloses retrieving one of the descriptive data by selecting on the graph one of the indicia (Figs 4-6, though this is done by the computer as it plots, not by a user).

With respect to claim 21, Elsmore discloses an apparatus comprising:

1) An electronic memory (Fig 2 item 52).

2) Means for obtaining a plurality of coating thickness values with a probe electrically connected to the electronic memory (Fig 2 items 18-22).

3) Means for recording in the electronic memory the plurality of coating thickness values (Fig 2 items 24, 36 and 50).

4) Means for recording in the electronic memory a plurality of descriptive data so that each descriptive data is associate with a respective one of the coating thickness values and provides information concerning the respective one coating thickness value (Fig 2 items 24, 36 and 50 and Fig 8, “Standoff” values are stored for each thickness value).

With respect to claims 23 and 26, Elsmore discloses that the descriptive data comprise textual descriptions of the thickness data (column 5 lines 16-30).

With respect to claims 25 and 28, Elsmore discloses that the descriptive data provides a description of a source of the coating thickness values (Figs 3a-7. It is disclosed that "standoff" values may be the result of another layer which is not conductive, this therefore "describes" the object).

With respect to claim 30, Elsmore discloses means for inputting the plurality of descriptive data (Fig 2 items 18-22).

With respect to claims 34 and 48, Elsmore discloses performing a statistical analysis of the plurality of coating thickness values (Fig 8 item 170).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 3, 10, 13-16 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elsmore (US pat 5416411).

With respect to parent claims 1 and 21, see the above anticipation by Elsmore.

With respect to claim 10, Elsmore discloses an apparatus comprising:

1) A probe which generates a first signal representative of a measured coating thickness (Fig 2 items 18-22).

2) A card connected to the probe and which receives the first signal from the probe, the card includes means for converting the first signal into a second signal which is compatible with an output format (Fig 2 items 24, 34 and 36).

With respect to claim 13, Elsmore discloses that the probe comprises a permanent magnet and a hall sensor (Fig 2 items 18-22).

With respect to claim 14, Elsmore discloses that the probe comprises an eddy current search coil (Fig 2 items 18-22).

With respect to claim 15, Elsmore discloses that the probe includes means for discriminating between a ferrous and a nonferrous substrate upon which the coating is coated (Fig 1, the sensor is an eddy current sensor and would give a different reading if the coating or under layer were ferrous vs. nonferrous. The fact that this device was not intended for such detection is irrelevant as the "means" exists for this application).

With respect to claim 16, Elsmore discloses a portable unit (Fig 2, at the very least this is portable by vehicle, machine, or a large number of men).

With respect to claim 22, Elsmore discloses coating thickness values transmitted to an electronic memory (Fig 2 item 52).

With respect to claims 3, 10, 16 and 22, Elsmore fails to disclose a PCMCIA card and a PCMCIA format.

One of ordinary skill in the art would have found it obvious to implement PCMCIA formatting in the apparatus of Elsmore. As it is a standard it is well known to and used in a wide variety of computing applications. One of ordinary skill in the art would have found the use of a common format obvious as it would then be compatible with other systems and would use

known components which would already have hardware and software support and would be readily available to those of routine skill in the art.

4.

Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elsmore as applied to claim 10 above, and further in view of Mulkey (US pat 5138268).

With respect to claim 11, Elsmore fails to disclose that the probe comprises an LC oscillator.

With respect to claim 12, Elsmore fails to disclose a counter which measures a frequency of the LC oscillator.

Mulkey teaches, with respect to claim 11, a probe which comprises an LC oscillator (Fig 3).

Mulkey teaches, with respect to claim 12, a counter which measures a frequency of the LC oscillator (Fig 3 and abstract).

It would have been obvious to one of ordinary skill in the art to modify the apparatus of Elsmore by utilizing an LC oscillator as taught by Mulkey. Elsmore discloses a device with a probe which contains two types of sensors for different applications, one of which is essentially limited to measuring layers comprising ferromagnetic materials. One of ordinary skill in the art would understand that the addition of an LC oscillator sensor would allow accurate measurement of non-conductive layers as well, thus imparting increased functionality and range of utility.

Conclusion

Claims 5, 17-20, 32, 35-38, 46-47 and 49-50 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JONATHAN TEIXEIRA MOFFAT whose telephone number is (571)272-2255. The examiner can normally be reached on Mon-Fri, from 7:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/jtm/
JTM
9/18/2008

/Bryan Bui/
Primary Examiner, Art Unit 2863